Citizens Energy Group--Indianapolis, Morgan County, and Citizens Southern Madison Consumer Confidence Report Data 2016

Contaminant	MCLG (Goal)	MCL (Limit)	Average of All Samples	Maximum of All Samples	System Wide Range	Compliance Achieved	Possible Source
Inorganics:							<u> </u>
Antimony (ppb)	6 ppb	6 ppb	BDL	0.60	ND - 0.60	Yes	Natural deposits
Arsenic (ppb)	0 ppb	10 ppb	BDL	2.8	ND - 2.8	Yes	Natural deposits
Barium (ppm)	2 ppm	2 ppm	0.14	0.34	0.035 - 0.34	Yes	Natural deposits
Chromium (ppb)	100 ppb	100 ppb	1.2	3.8	ND - 3.8	Yes	Natural deposits Natural deposits & treatment
Fluoride (ppm)	4 ppm	4 ppm	0.80	1.3	0.13 - 1.3	Yes	additive
Nitrate (ppm)	10 ppm	10 ppm	0.99	4.6	ND - 4.6	Yes	Fertilizer, septic tank leachate
Other Regulated Organics:	70	70h	0.13	0.50	ND - 0.50	Yes	Herbicide runoff
2,4-D (ppb)	70 ppb	70 ppb	ND ND	ND	ND ND	Yes	Herbicide runoff
Alachlor (ppb)	3 ppb	3 ppb	0.15	1.5	ND - 1.5	Yes	Herbicide runoff
Atrazine (ppb)	3 ppb	3 ppb	0.13	1.3	110-1.0	100	Leaching from linings of water
Benzo[a]pyrene (ppb)	0 ppb	0.20 ppb	ND _	ND	ND	Yes	storage tanks and distribution lines
Ethyl benzene (ppb)	700 ppb	700 ppb	ND	ND	ND	Yes	Discharge from petroleum refineries
Simazine (ppb)	4 ppb	4 ppb	BDL	1.1	ND - 1.1	Yes	Herbicide runoff Discharge from petroleum
Toluene (ppb)	1,000 ppb	1,000 ppb	BD1.	1.8	ND - 1.8	Yes	refineries
Total Xylenes (ppb)	10,000 ppb	10,000 ppb	BDL	0.81	ND - 0.81	Yes	Discharge from petroleum refineries
Turbidity:	1 10,000 ppo	Π					
Turbidity (NTU)	N/A	1 NTU	0.11	0.20	0.014 - 0.20	Yes	Soil runoff
Turbidity (% below TT)	N/A	95% <0.3 NTU			100%	Yes	Soil runoff
Secondary Drinking Water Standards:	MCLG (Goal)	SMCL	*Secondary stan	dards are non-ent discolo	forceable guidelines regulating con ration) or aesthetic effects (such as	taminants that may cause cost taste, odor, or color) in drinkir	ng water
	INDEO (GOUI)	200 ppb	37	300	ND - 300	N/A	Natural deposits; water treatment additive
Aluminum (ppb)		250 ppm	66	140	14 - 140	N/A	Natural deposits; water treatment additive
Chloride (ppm)		N/A	309	534	129 - 534	N/A	Erosion of natural deposits;
Hardness (ppm)					ND - 0.148	N/A	leaching Erosion of natural deposits;
Iron (ppm)		0.3 ppm	BDL	0.148	ND - 0.022	N/A	leaching Erosion of natural deposits; leaching
Manganese (ppm)		0.05 ppm	BDL	0.022		N/A	
Metolachlor (ppb)	-	N/A	BDL		ND - 0.20 ND	N/A	Herbicide runoff Erosion of natural deposits; leaching
Nickel (ppb)	100 ppb	N/A	ND	ND 9.45	7.11 - 8.15	N/A	reacting
pH (Standard Units)		6.5 - 8.5	7.66	8.15	8.1 - 94	N/A	Erosion of natural deposits;
Sodium (ppm)		N/A	35	94			leaching Erosion of natural deposits; leaching
Sulfate (ppm)		250 ppm	52	214	3.3 - 214	N/A	
Zinc (ppb) Untreated Source Water:		5000 ppb	BDL	5.1	ND - 5.1	N/A	Natural deposits
Cryptosporidium (org/10L)			1	2	1 - 2 oocysts / 10 L	N/A	
			5	7	ND - 7 cysts / 10 L	N/A	
Giardia (org/10L)	N/A	N/A	4.1	7.2	2.7 - 7.2	N/A	Naturally present in the environment
TOC (Untreated Water, ppm)	INIA	1905		-1-11-1			
Disinfectant Residual:	MRDLG	MRDL					Water additive used to control
Chlorine (as Cl2)	4 ppm	4 ppm	1.5	2.7	ND - 2.7	Yes	microbes.
Copper and Lead (Indianapolis)	MCLG	AL			0.20 (0 of 52 > AL) 90th		
Copper (ppm) [2016 Data]	1.3 ppm	1.3 ppm			Percentile	Yes	Corrosion of customer plumbir
Copper (ppm) [2016 Data]					Percentile 5.7 (0 of 52 > AL) 90th		
Lead (ppb) [2016 Data]	1.3 ppm 0 ppb	1.3 ppm 15 ppb			Percentile	Yes Yes	
					Percentile 5.7 (0 of 52 > AL) 90th Percentile		Corrosion of customer plumbin
Lead (ppb) [2016 Data]			61	87	Percentile 5.7 (0 of 52 > AL) 90th		
Lead (ppb) [2016 Data] Organic Disinfection By-products (Indianapolis)	0 ppb	15 ppb	61		Percentile 5.7 (0 of 52 > AL) 90th Percentile 61 (16 - 87) Highest Locational Running Annual Average 42 (8.5 - 63) Highest Locational	Yes	By-product of chlorination treatment By-product of chlorination
Lead (ppb) [2016 Data] Organic Disinfection By-products (Indianapolis) Total Trihalomethanes (TTHMs) Haloacetic acids (HAA5)	0 ppb	15 ppb	61	87 63	Percentile 5.7 (0 of 52 > AL) 90th Percentile 61 (16 - 87) Highest Locational Running Annual Average	Yes	Corrosion of customer plumbin By-product of chlorination treatment
Lead (ppb) [2016 Data] Organic Disinfection By-products (Indianapolis) Total Trihalomethanes (TTHMs) Haloacetic acids (HAA5) Microorganisms (Indianapolis)	0 ppb N/A N/A	15 ppb 80 ppb 60 ppb	42	63	Percentile 5.7 (0 of 52 > AL) 90th Percentile 61 (16 - 87) Highest Locational Running Annual Average 42 (8.5 - 63) Highest Locational Running Annual Average	Yes Yes	Corrosion of customer plumbing By-product of chlorination treatment By-product of chlorination treatment
Lead (ppb) [2016 Data] Organic Disinfection By-products (Indianapolis) Total Trihalomethanes (TTHMs) Haloacetic acids (HAA5) Microorganisms (Indianapolis) E coil	0 ppb	15 ppb 80 ppb 60 ppb	42	63	Percentile 5.7 (0 of 52 > AL) 90th Percentile 61 (16 - 87) Highest Locational Running Annual Average 42 (8.5 - 63) Highest Locational Running Annual Average 0	Yes Yes Yes	Corrosion of customer plumbing By-product of chlorination treatment By-product of chlorination treatment Human and animal fecal was Naturally present in the
Lead (ppb) [2016 Data] Organic Disinfection By-products (Indianapolis) Total Trihalomethanes (TTHMs) Haloacetic acids (HAA5) Microorganisms (Indianapolis) E coli Total Coliforms	N/A N/A	80 ppb 60 ppb 1 5.0%	42	63	Percentile 5.7 (0 of 52 > AL) 90th Percentile 61 (16 - 87) Highest Locational Running Annual Average 42 (8.5 - 63) Highest Locational Running Annual Average 0 0% - 0.3%	Yes Yes Yes Yes	By-product of chlorination treatment By-product of chlorination treatment By-product of chlorination treatment Human and animal fecal was: Naturally present in the environment
Lead (ppb) [2016 Data] Organic Disinfection By-products (Indianapolis) Total Trihalomethanes (TTHMs) Haloacetic acids (HAA5) Microorganisms (Indianapolis) E coli Total Coliforms Cryptosporidium (org/10L)	0 ppb N/A N/A 0 0 org/10L	80 ppb 60 ppb 1 5.0%	42	63	Percentile 5.7 (0 of 52 > AL) 90th Percentile 61 (16 - 87) Highest Locational Running Annual Average 42 (8.5 - 63) Highest Locational Running Annual Average 0 0% - 0.3% No Organisms Found	Yes Yes Yes Yes Yes Yes	By-product of chlorination treatment By-product of chlorination treatment By-product of chlorination treatment Human and animal fecal was Naturally present in the environment Removed during treatment
Lead (ppb) [2016 Data] Organic Disinfection By-products (Indianapolis) Total Trihalomethanes (TTHMs) Haloacetic acids (HAA5) Microorganisms (Indianapolis) E coli Total Coliforms	N/A N/A	80 ppb 60 ppb 1 5.0%	42	63	Percentile 5.7 (0 of 52 > AL) 90th Percentile 61 (16 - 87) Highest Locational Running Annual Average 42 (8.5 - 63) Highest Locational Running Annual Average 0 0% - 0.3%	Yes Yes Yes Yes	By-product of chlorination treatment By-product of chlorination treatment By-product of chlorination treatment Human and animal fecal was Naturally present in the environment Removed during treatment
Lead (ppb) [2016 Data] Organic Disinfection By-products (Indianapolis) Total Trihalomethanes (TTHMs) Haloacetic acids (HAA5) Microorganisms (Indianapolis) E coli Total Coliforms Cryptosporidium (org/10L) Glardia (org/10L)	0 ppb N/A N/A 0 0 org/10L	80 ppb 60 ppb 1 5.0%	42	63	Percentile 5.7 (0 of 52 > AL) 90th Percentile 61 (16 - 87) Highest Locational Running Annual Average 42 (8.5 - 63) Highest Locational Running Annual Average 0 0% - 0.3% No Organisms Found	Yes Yes Yes Yes Yes Yes Yes Yes Yes	By-product of chlorination treatment By-product of chlorination treatment By-product of chlorination treatment Human and animal fecal was: Naturally present in the environment Removed during treatment Removed during treatment Erosion of natural deposits
Lead (ppb) [2016 Data] Organic Disinfection By-products (Indianapolis) Total Trihalomethanes (TTHMs) Haloacetic acids (HAA5) Microorganisms (Indianapolis) E coli Total Coliforms Cryptosporidium (org/10L) Giardia (org/10L) Radionuclides (Indianapolis): [2016 Data]	0 ppb N/A N/A 0 0 org/10L 0 org/10L 0	80 ppb 80 ppb 1 5.0% TT TT 5 30	42	63	Percentile 5.7 (0 of 52 > AL) 90th Percentile 61 (16 - 87) Highest Locational Running Annual Average 42 (8.5 - 63) Highest Locational Running Annual Average 0 0% - 0.3% No Organisms Found No Organisms Found 0 - 1.7 0.13 - 0.93	Yes	By-product of chlorination treatment By-product of chlorination treatment By-product of chlorination treatment Human and animal fecal was: Naturally present in the environment Removed during treatment Removed during treatment Erosion of natural deposits Erosion of natural deposits
Lead (ppb) [2016 Data] Organic Disinfection By-products (Indianapolis) Total Trihalomethanes (TTHMs) Haloacetic acids (HAA5) Microorganisms (Indianapolis) E coli Total Coliforms Cryptosporidium (org/10L) Glardia (org/10L) Radionuclides (Indianapolis): [2016 Data] Combined Radium (-226 & -228) Combined Uranium Gross Alpha, Excl. Radon & Uranium	0 ppb N/A N/A 0 0 org/10L 0 org/10L	80 ppb 60 ppb 1 5.0% TT TT	42	63	Percentile 5.7 (0 of 52 > AL) 90th Percentile 61 (16 - 87) Highest Locational Running Annual Average 42 (8.5 - 63) Highest Locational Running Annual Average 0 0% - 0.3% No Organisms Found No Organisms Found 0 - 1.7	Yes Yes Yes Yes Yes Yes Yes Yes Yes	By-product of chlorination treatment By-product of chlorination treatment By-product of chlorination treatment Human and animal fecal was: Naturally present in the environment Removed during treatment Removed during treatment Erosion of natural deposits Erosion of natural deposits
Lead (ppb) [2016 Data] Organic Disinfection By-products (Indianapolis) Total Trihalomethanes (TTHMs) Haloacetic acids (HAA5) Microorganisms (Indianapolis) E coli Total Coliforms Cryptosporidium (org/10L) Glardia (org/10L) Glardia (org/10L) Radionuclides (Indianapolis): [2016 Data] Combined Radium (-226 & -228) Combined Uranium Gross Alpha, Excl. Radon & Uranium Morgan County	0 ppb N/A N/A 0 0 org/10L 0 org/10L 0 0	15 ppb 80 ppb 60 ppb 1 5.0% TT TT 5 30 15	42	63	Percentile 5.7 (0 of 52 > AL) 90th Percentile 61 (16 - 87) Highest Locational Running Annual Average 42 (8.5 - 63) Highest Locational Running Annual Average 0 0% - 0.3% No Organisms Found No Organisms Found 0 - 1.7 0.13 - 0.93	Yes	By-product of chlorination treatment By-product of chlorination treatment By-product of chlorination treatment Human and animal fecal wast Naturally present in the environment Removed during treatment Removed during treatment Erosion of natural deposits Erosion of natural deposits
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